

THE CITY OF WARWICK
STATE OF RHODE ISLAND

APPENDIX A

ZONING

No..... Date.....

Approved.....Mayor

AN ORDINANCE RELATIVE TO AMENDMENT OF THE WARWICK ZONING
ORDINANCES: DEFINITIONS SECTION 200, ESTABLISHMENT AND
CLASSIFICATION OF DISTRICTS SECTION 300, (NEW SECTION) SPECIAL
REGULATIONS IN SECTION 509, ACCESSORY USE SECTIONS 601.2 AND 601.10 OF
APPENDIX A, ZONING ORDINANCES.

Be it ordained by the City of Warwick:

Section I. Appendix A of the City of Warwick Code of Ordinances is hereby amended as follows:

[. . .]

SECTION 200. - Definitions.

Contaminated site. A property (1) that has been identified ~~and confirmed~~ by the Rhode Island Department of Environmental Management (RIDEM) as having reviewed utility-scale solar energy system, ground-mounted and contains ~~contained a~~ hazardous material contamination; (2) on which remediation activities were conducted to the satisfaction of RIDEM as documented within a “Letter of Compliance” or an “Interim Letter of Compliance,” and (3) for which RIDEM has required the use of the property to be restricted through an Environmental Land Use Restriction.

Solar energy system, accessory. A solar energy system that is incidental and subordinate to the principal use(s) of the parcel or development including the following:
(a) Roof or building-mounted energy-generating panels;
(b) Solar canopies.

Utility-scale ~~Solar-s~~ energy system, ground-mounted. A solar energy system that has a support structure fixed or secured to the ground through the use of structural footings, and ballasts, ~~and is restricted to contaminated sites only.~~

- 1 *Solar energy system, canopy.* A solar energy system that has a support structure secured to the
- 2 ground through the use of structural footings and is restricted to paved areas such as parking lots.
- 3
- 4 *Solar energy system, roof- or building-mounted.* A solar energy system that is structurally mounted
- 5 to, structurally ballasted, or integrated into the design of the roof or any other architectural aspect
- 6 of a building or structure.
- 7 [. . .]

1 **SECTION 300. – Establishment and Classification of Districts.**

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TABLE 1. USE REGULATIONS

Zoning Districts	OS	A-40	A-15	A-10	A-7	O	WB	GB	LI	GI	<i>Inter-modal</i>	<i>Gate-way</i>	<i>Village District</i>
600 Transportation, communication and utility uses:													
608 Electric Power Plant	No	S	No	No	No								
608 Accessory use solar canopy	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
612 Contaminated Site <u>(Utility-scale solar energy system, ground-mounted.</u>	No	S <u>Yes</u> <small>28</small>	S <u>Yes</u> <small>28</small>	No	No	No							
613 Accessory use rooftop solar	No	Yes	Yes	Yes	Yes	Yes							
<u>614 Utility-scale, solar energy system, ground-mounted.</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>No</u>								

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7 ²⁸Subject to all applicable review procedure and performance standards outlined in Section 509.

1 **509. - Administrative procedures for solar energy systems on contaminated sites.**

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3 Purpose and Applicability.

4 The purpose of this section is to regulate the installation of solar energy systems by providing
5 standards for the placement, design, construction, operation monitoring modification and
6 removal of such systems. These standards are intended to ensure that solar energy systems
7 are compatible with the surrounding area, provide for public safety, and minimize impacts on
8 scenic, natural, and historic resources. The Provision of this section shall apply, as specified
9 herein, to construction, operation, and/or repair of solar energy system installation in the
10 City.

11
12 Utility-scale, solar energy system, ground-mounted (which refers to systems that are not either
13 (1) and Accessory solar system or (2) a contaminated site solar system as defined by this
14 ordinance) shall be prohibited throughout the City of Warwick.

15 ~~The purpose of this section is to spell out review procedures and standards for solar arrays for~~
16 ~~contaminated properties.~~

17
18 509.1 Review procedures. Contaminated sites (i.e. brownfield sites) subject to solar energy
19 systems shall require Planning Board review in accordance with Major Land Development
20 review provisions.

21 Any system located in a historic overlay district in view of a public ROW as determined by
22 the Building Official, must obtain a Certificate of Appropriateness in accordance with Section
23 311.

24 509.2 Performance standards. These standards shall be required in addition to the Major Land
25 Development review procedures set forth by RIGL 45-23 and the City's Subdivision and Land
26 Development Regulations. The standards set forth herein will ensure that solar energy systems
27 are compatible with the surrounding area, provide for public safety, and minimize impacts on
28 scenic, natural, historic resources, and abutting properties.

- 29
30 (A) SES panels and equipment shall be sited (as evidenced by photographs taken from
31 abutting properties and rights of way) within the project site to minimize adverse visual
32 impacts to nearby properties and public rights of way.
- 33 (B) All solar energy systems shall, at minimum, employ the zoning setback requirements in
34 Table 2 A & B, entitled Dimensional Regulations. The Planning Board shall reserve
35 the right to increase setbacks to minimize visibility of the system as a result of
36 information learned through public hearings.
- 37 (C) The maximum height of a ground-mounted solar energy system shall be 10 feet.
- 38 (D) To prevent glare on adjacent properties and mitigate public safety potential, only matte
39 finish, and non-reflective panels shall be utilized.
- 40 (E) The applicant shall submit an independent, pre-development noise study for which a
41 baseline shall be established indicating general background noise in perimeter areas
42 adjacent to neighbors averaged over several weeks. A post startup noise study shall be
43 executed to ensure no increase in noise occurs from the facility. Noise mitigation must
44 be employed for solar energy systems responsible for an increased decibel level of 3dB.

- 1 (F) Accessibility for emergency service vehicles is required along with clearly-marked
2 procedures for shutting down the solar energy system.
- 3 (G) A public safety preparedness and response plan detailing the standards, procedures, and
4 communication protocol to be utilized for the system and in the event of an emergency
5 shall be provided to the City's emergency management agency director, as well as
6 documentation indicating that the plan has been distributed to the fire department.
- 7 (H) Contaminated sites shall be remediated and properly capped in accordance with State or
8 Federal remediation standards as part of the development.
- 9 (I) Unless required by ELUR, no substantial clearing or grading of the proposed project
10 site shall have occurred five (5) years prior to submission of the application for an SES
11 based on a review of aerial photography provided by the applicant.
- 12 (J) Clearcutting outside of the immediate array area is prohibited unless required by
13 remediation permit. A reforestation plan prepared by a certified forester (CF) or
14 registered landscape architect shall be required to minimize view shed nuisance from
15 the perspective of abutters.
- 16 (1) A combination of natural vegetation, berms, fencing, walls, and other similar
17 features shall be used to visually buffer the system(s) from the view of abutting
18 properties, as well as mitigate noise, glare, or other potential nuisances.
- 19 (2) No chemicals, solvents, herbicides, or insecticides, excluding water, will be used
20 in the operation and maintenance of the solar energy system. ~~No insecticides shall~~
21 ~~be utilized to promote pollinator growth at any time during the life of the project.~~
- 22 (3) Buffer plantings shall be maintained for the life of the project by the owner,
23 applicant, and or operator of the facility.
- 24 (4) A 1 to 1 tree replacement effort shall occur within the City for all trees requiring
25 removal that are of 20 inches in diameter or larger. All newly-planted trees shall
26 be a minimum of 3 inch caliper at breast height.
- 27 (5) Soil erosion and sediment control systems shall be maintained at all times in
28 accordance with RIDEM wetlands permit(s), and local regulations.
- 29 (K) Neither blasting nor removal of ledge by mechanical means is allowed.
- 30 (L) Pollinator mix is required, shall be supported by a maintenance plan, and contain
31 annual reports supplied by the applicant's landscape architect until the pollinator mix
32 approved by RIDEM is established. Disturbed topsoil shall remain onsite unless
33 removal is required by remediation permit(s).
- 34 (M) Utility connections shall be underground, equipment screened from view with plantings
35 or fencing, and approved by the utility company as part of the Final Plan Application.
- 36 (1) Interconnection agreement shall be compliant with Code of Ordinance Section 74-
37 52, Renewable energy system tax exemption, and submitted with the Final Plan
38 Application.
- 39 (2) A comprehensive development pro forma including but not limited to land cost
40 (lease or purchase, equipment cost, construction, decommission cost etc., shall be
41 submitted with Final Plan application.

- 1 (N) Perimeter fencing shall be raised a minimum of 8 inches for wildlife passage and be
2 comprised of black coated chain link fence.
- 3 (O) A sign shall be posted at the entry of the SES displaying the name of the owner and
4 operator of the system and a twenty-four (24) hour emergency contact number.
- 5 (P) SES systems shall provide for motion detect lighting in maintenance areas and dark sky
6 compliant lighting elsewhere.
- 7 (Q) Applicant shall provide a decommissioning plan and cost estimate with the Preliminary
8 Application, and surety funds provided with the Final Plan Application to ensure
9 adequate removal at the end of useful life or abandonment.

10 (1) Funds deposited shall be equal in amount to removal of the system, as verified by
11 the City's peer review engineer, inclusive of 2% annual inflation over life of the
12 system with funds deposited into an interest bearing escrow account under City
13 control.

14 ~~(1)~~(2) The calculation of the decommissioning reserve shall be predicated upon the
15 assumption that 100% of the retired solar panels will be recycled by an accredited solar
16 panel waste recycler, without any credit on the financial guarantee amount for
17 anticipated salvage value or reuse of and project components. City peer review
18 engineers shall afford the City the right to evaluate the inflation rate every 5 years.

19 ~~(2)~~(3) A separate surety of an amount equal to the cost of repairing 100% of the
20 pollinator mix, as established by the City's peer review engineer during Preliminary
21 Application review, shall be submitted with the Final Plan Application.

22 (4) Within one week after permanent shutdown, the owner, applicant, and or operator
23 shall notify the Building Official and remove the system within 6 months of said
24 notification. The City shall utilize escrow funds to remove all or remaining system
25 components beyond six months, with owner, applicant, and or operator liable for
26 all expenses beyond escrow, should escrow be exceeded. City shall retain the right
27 to fine the owner in accordance with local ordinances.

28 (R) Maintenance. The contaminated site solar energy system shall be maintained by the solar
29 energy owner and/or operator and shall be cleared of debris, weeds, trash, etc.
30 Maintenance shall include, but not be limited to, painting, structural repairs, maintenance
31 of the landscape buffers, care and replanting if necessary, of any vegetative screening,
32 cleaning clearing and repairing of stormwater and drainage infrastructure, and integrity
33 of security measures.

34 (S) Enforcement. The Building/zoning Official and Town engineering consultant a have
35 the power to inspect any solar energy system at any time to ensure compliance with the
36 provisions of this Ordinance. Any entity who fails or refuses to adhere to all of the
37 provisions of this Ordinance or any other conditions imposed by the City, State of
38 Rhode Island or Federal government, shall be deemed to be in violation and liable to
39 the City of Warwick for penalties not to exceed \$500 per day for each violation. Each
40 day of existence of a violation shall be deemed a separate offense.

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42 (T) Inspection. The Town's Engineer or designee shall inspect any contaminated site solar
43 energy system at the expense of the applicant on a weekly basis during construction, and

1 [during the month of April each year after completion of construction. Said inspection will](#)
2 [include a review of any and all reports as required by the State of Rhode Island, the City of](#)
3 [Warwick and the Federal Government. The applicant and any successor shall reimburse](#)
4 [the City for any cost incurred as specified in the Stormwater Facility Maintenance](#)
5 [Agreement.](#)

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7 ~~(3)~~
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9 601.2 (A) A building or use accessory to a dwelling, including an attached, detached garage,
10 carport, or solar canopy, shall not be located in any required front or corner side yard....

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12 601.10. *Accessory solar energy systems (SES)*. Accessory SESs shall require a building permit
13 only, shall not require Planning Board review as land development projects, and shall be
14 subject to the following requirements:

15
16 (A) Roof or building mounted SES must not increase the footprint of the structure.

17 (B) Accessory solar canopies in non-residential zones shall comply with all operating
18 standards outlined under Section 604.

19 (C) *Color and materials*. Solar canopies shall be visually and architecturally compatible with
20 the building, in terms of color, lighting, and basic form. Where appropriate, integrated
21 artwork, trim additions, or other such design features shall be used to improve
22 architectural compatibility. Ground level casings, conduits, and other electronics shall be
23 given similar treatment as the main structures of the solar canopies.

24 (D) Solar canopies shall include, by AASHTO or equivalent standards, lighting beneath
25 canopies to ensure pedestrian and vehicular safety.

26 (E) Accessory solar canopies shall be shut down in the event of an abandonment or vacancy
27 of the primary use of the property to ensure public safety and ensure employment is not
28 displaced by solar canopies.

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30 Section II: This Ordinance shall take effect upon passage.
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33 SPONSORED BY:

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35 COMMITTEE: ORDINANCE
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